

Remarks

Favorable reconsideration of this application is requested in view of the following remarks. For the reasons set forth below, Applicant respectfully submits that the claimed invention is allowable over the cited references.

Per the final Office Action, Applicant appreciates the allowance of claims 8-10, 17, 21, 23, 24, 27, 30, 32, 33, 34 and 35.

The Office Action also indicated the following rejections: claims 25, 38 and 39 under 35 U.S.C. § 112(2) for lack of antecedent wording; claims 1, 6, 11, 15 and 20 are rejected under 35 U.S.C. § 102(e) over *Bingel et al.* (U.S. Patent No. 6,173,021); claims 2 and 26 are rejected under 35 U.S.C. § 103(a) over *Szechenyi* (U.S. Patent No. 5,271,037) in view of *Sands* (U.S. Patent No. 6,134,283); claims 3 and 28 are rejected under § 103(a) over *Szechenyi* in view of *Sands* and further in view of *Pfeil et al.* (U.S. Patent No. 6,160,511); claims 4 and 19 are rejected under § 103(a) over *Bingel* in view of *Gitlin* (U.S. Patent No. 4,995,104); claim 5 is rejected under § 103(a) over *Bingel* in view of *Gitlin* and further in view of *Sands*; claims 7, 16 and 25 are rejected under § 103(a) over *Bingel* in view of *Sands*; claims 12 and 13 are rejected under § 103(a) over *Bingel*; claim 14 is rejected under § 103(a) over *Bingel* in view of *Terry* (U.S. Patent No. 6,055,297); claim 18 is rejected under § 103(a) over *Bingel* in view of *Terry* and further in view of *Pfeil*; claim 22 is rejected under § 103(a) over *Bingel* in view of *Cioffi* (U.S. Patent No. 5,887,032); claim 29 is rejected under § 103(a) over *Bingel* in view of *Sands* and further in view of *Gitlin*; claim 40 (corresponding to original claim 4) remains rejected under § 103(a) over *Szechenyi* in view of *Gitlin*; and claim 31 is rejected under § 103(a) over *Szechenyi* in view of *Terry*.

With respect to each of the Section 112(2) rejections, Applicant respectfully traverses. As set forth in MPEP § 2173.05(e), lack of express antecedent basis in the wording of a claim does not necessarily support a *prima facie* case of rejection under the statute. With respect to each of claims 25, 38 and 39, their meaning is clear to the skilled artisan especially when read in light of the specification and claims. Notwithstanding, in an effort to facilitate prosecution after final rejection, Applicant has canceled claims 38 and 39 and submitted a minor amendment to claim 25 to address this antecedent wording issue. In view of this cancellation, the above remarks and facilitating amendment, Applicant submits that the Section 112(2) rejections should be removed.

With respect to the Section 102(e) rejection of claims 1, 6, 11, 15 and 20, each of these claims is patentably distinguishable from the cited teachings of *Bingel*. *Bingel* does not teach or suggest the invention set forth in Applicant's claims. For instance, the Office Action cites Figure 1, reference item No. 6 and column 3, lines 30-33, as support for the erroneous interpretation that *Bingel* teaches detecting (or perhaps the Office Action means collecting) interference data and adaptively producing an interference cancellation signal at a location remote from the *Bingel* receiver. As acknowledged in the Office Action, at column 3, lines 30-33, *Bingel* teaches that the interference canceler can be implemented within the modem (housing) or implemented separate from the modem (housing). Nowhere does *Bingel* teach that the interference canceler is to be at a location remote from the *Bingel* receiver. On the contrary, *Bingel* expressly teaches and claims that the interference canceler and the *Bingel* receiver are to be co-located at the customer's premises. For example, as set forth in each of *Bingel*'s independent claims, the entire *Bingel* apparatus is to be "located at the customer's premises" and the corresponding method is to be practiced "at the customer's premises." See, e.g., *Bingel*'s claims 1, 2, 3, 13, 14 and 15. As set forth in the MPEP (e.g., § 706.03(d)), the claim terminology is to carry a plain meaning that is consistent with the Specification. Applying this rule, neither the *Bingel* reference nor Applicant's claims would tolerate an interpretation that would support the rationale used in attempt to support the instant § 102(e) rejection. In view thereof, Applicant submits that the § 102(e) rejection should be removed.

With respect to the § 103(a) rejection of claims 2 and 26 over *Szechenyi* in view of *Sands*, Applicant maintains the traversal (incorporating the arguments previously presented) and further submits that the Examiner's Response to Applicant's Arguments is flawed. Neither *Szechenyi* nor *Sands* discloses use of a timing offset between the received data and the crosstalk data, as claimed. With respect to *Szechenyi*, this point is acknowledged in the Office Action. With respect to *Sands*, the Examiner's Response erroneously interprets *Sands* as teaching use of this timing offset is part of its secondly-described aspect in which crosstalk interference levels are used to obtain synchronization.

Sands does not teach or make any mention of a timing offset between the two claimed parameters for achieving synchronization or for any other purpose. Rather, as described in connection with the discussion of figures 5A, 5B, 6A and 6B (columns 12-13),

Sands teaches use of measured energy values for crosstalk interference to determine whether those “FFT outputs that are susceptible to RF interference are [to be] dropped.” *Sands* at column 12, lines 61-62. In the ensuing discussion, *Sands* explains that even for alternative embodiments, time domain samples that are subjected to substantial amounts of RF interference are filtered out. *Sands* at column 13, lines 21-25. The Office Action citations to the Summary portion of *Sands* do not support the rejection. Moreover, as neither *Szechenyi* nor *Sands* discloses use of the claimed timing offset between the received data and the crosstalk data, a *prima facie* case of patentability has not been made and the rejection of claims 2 and 26 cannot stand.

With respect to the § 103(a) rejection of claims 3 and 28 over *Szechenyi* in view of *Sands* and further in view of *Pfeil*, Applicant maintains the traversal (again incorporating the arguments previously presented) and submits that the above discussion in connection with the rejection of underlying claims 2 and 26 adequately overcomes this rejection.

With respect to the § 103(a) rejection of claim 31 over *Szechenyi* in view of *Terry*, for the purpose of facilitating prosecution and without prejudice to further prosecution of this subject matter at a later date, Applicant has canceled claim 31. Thus, the rejection is now moot.

Applicant also traverses each of the following § 103(a) rejections that rely primarily on the above-discussed erroneous interpretation of *Bingel*. These rejections are with regards to: claims 4 and 19 over *Bingel* in view of *Gitlin*; claim 5 over *Bingel* in view of *Gitlin* and further in view of *Sands*; claims 7, 16 and 25 over *Bingel* in view of *Sands*; claims 12 and 13 over *Bingel*; claim 14 over *Bingel* in view of *Terry*; claim 18 over *Bingel* in view of *Terry* and further in view of *Pfeil*; claim 22 over *Bingel* in view of *Cioffi*; and claim 29 over *Bingel* in view of *Sands* and further in view of *Gitlin*. Applicant’s traversal is based on the lack of correspondence between these rejected claims and the relied-upon teachings of *Bingel*, as discussed above. Furthermore, with and without this misinterpretation of the teachings of *Bingel*, Applicant fails to recognize how these teachings are being combined in a manner both suggested by the prior art and consistent with the purpose and goals of the teachings of *Bingel*. See e.g., MPEP § 2143.01 (A § 103 rejection cannot be maintained when the asserted modification undermines the implementation or purpose of the main reference.); and *Ruiz v. A.B. Chance Co.*, 234 F.3

654 (December 6, 2000) (“Our court has provided [that the] motivation to combine may be found explicitly or implicitly: 1) in the *prior art references* themselves; 2) in the knowledge of those of ordinary skill in the art that certain *references*, or disclosures in those references, are of special interest or importance in the field; or 3) from the nature of the problem to be solved, ‘leading inventors to look to *references* relating to possible solutions to that problem.’”). Accordingly, Applicant submits that these § 103(a) rejections should be removed.

With respect to the rejection of claim 40, Applicant respectfully submits that the Examiner has maintained the same rejection without providing any response to Applicant’s previous arguments and explanation of patentability. Applicant noted that claim 40 corresponded to previously presented claim 4 and traversed this rejection with an extensive discussion in support of the traversal. In view of this previously provided traversal and/or oversight in the final Office Action, and in order to comply with 35 U.S.C. § 132 and various provisions in the C.F.R. and MPEP, maintaining the final rejection as such is improper and, therefore, the rejection should be withdrawn.

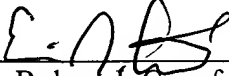
Applicant further traverses each of the above-noted rejections in which the previous claim rejection has been replaced with another substantially-similar rejection, wherein the difference is replacing the *Szechenyi* reference with the *Bingel* reference. As discussed in the previously-submitted Office Action response, the cited teachings in *Szechenyi* fail to provide correspondence to the claimed invention, for example, where Applicant’s claim is directed to processing noise in a received signal at a location remote from the receiver. As with the *Szechenyi* reference, the replacement *Bingel* reference also concerns noise processing only at a location that is at the location of the receiver. Thus, the final Office Action has merely swapped references with no substantive response to Applicant’s arguments. Applicant respectfully submits that MPEP § 707.07(f), and other relevant regulations, requires that the final Office Action be withdrawn.

In view of the above, the rejections have been addressed and/or overcome and each of the pending claims is now believed to be in condition for allowance.

Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is encouraged to contact the undersigned at (651) 686-6633.

Respectfully submitted,

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